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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,661	11/29/2001	Emin Martinian		4874

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EXAMINER

TU, CHRISTINE TRINH LE

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,661

Applicant(s)

MARTINIAN ET AL.

Examiner

Christine T. Tu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,11-14 and 24-27 is/are rejected.
7) ☒ Claim(s) 2-10,15-23 and 28-32 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. Applicant is requested to update the status of the listed related applications at lines 13 and 19 on page 1 of the specification.

Claim Objections

2. Claims 9, 10, 22, 23 and 32 are objected to because of the following informalities:

Claims 9, 10, 22, 23, and 32:

At line 2, the use of the quotation marks around a term should be avoided because it is not clear whether the term "MS" (with the quotation marks) has any specific meaning other than just the abbreviation for the term "maximally short".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 11-14, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Izumita et al. (4,764,927 and Izumita hereinafter).

Claims 1 and 11:

Izumita shows (figures 1 and 2) a code error correcting system and a method thereof comprising a horizontal error correction and detection circuit (1) for correcting and/or detects errors in data A. An output data B from the Horizontal error correction/detection circuit (1) is inputted to a vertical error detection circuit (2). The vertical error detection circuit then detects and checks to determine whether or not an error is detected. If an error is detected, a number C of a symbol in which an error has occurred is outputted to the burst error check circuit (3). The burst error check circuit (3) determines whether or not the column positions of the columns associated with the detected errors are successive and outputs a correction mode change-over signal D to the change-over circuit (6). The vertical random error correction circuit (4) corrects a 1-symbol error in vertical direction and outputs an output data E. In addition, the vertical erasure correction circuit (5) executes an erasure correction for any error including at most two erroneous symbols in the vertical direction by use of output data B from the

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horizontal error correction/detection circuit (1) and outputs an output G. The change-over circuit (6) selects the output data E or the output data G in responsive to the signal D to output an output data I (figures 1 & 2, column 2 line 58-column 3 line 8; column 3 line 38-column 4 line 10).

Izumita does not explicitly teach the first selected threshold. Izumita, however, teaches the condition of at least "several numbers" (of errors) consecutively occur (column 2 line 63-column 3 line 2). It would have been obvious to one skilled in the art at the time the invention was made to realize that the amount of Izumita's "several numbers" would have been set and named as "the first selected threshold". One having ordinary skill in the art would be motivated to do so because naming the set amount of Izumita's "several numbers" as the "first selected threshold" would not actually change its content.

Claims 12 & 13:

Izumita's change-over circuit (6) selects the output data E or the output data G in responsive to the signal D to output an output data I (figure 2, column 4 lines 3-10).

Claim 14:

Izumita does not explicitly teach that the error corrector is a Viterbi decoder. However, Izumita teaches the random error correction circuit (4) (figure 2). It would have been obvious to one skilled in the art at the time the invention was made to realize that Izumita's random error correction circuit would have been a Viterbi decoder. The

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artisan would have been motivated to do so because using Viterbi decoder for random error correction is well-known in the art.

Claims 24-26:

Izumita teaches that his decoding method or a code error correcting method is in a apparatus in which digital signals are recorded and reproduced, and in particular, to a code error correcting method suitable for improving the decoding efficiency in the encoding code system (column 1 lines 5-10).

Claim 27:

Claim 27 is rejected for reasons similar to those set forth against claims 11-13.

6. Claims 2-10, 15-23 and 28-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (571)272-3831. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571)272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Christine T. Tu
Primary Examiner
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March 6, 200